Clean Specification

DIAGNOSIS SYSTEM FOR HOUSEHOLD ELECTRIC APPLIANCES

Cross-Reference To Related Applications

This is a U.S. national phase application under 35 U.S.C. §371 of International Patent Application No. PCT/BR2003/000185, filed December 2, 2003, and claims benefit of Brazilian Patent Application No. PI 0205470-1, filed December 5, 2002 both of which are incorporated by reference herein. The International Application was published in English on June 17, 2004 as WO 2004/051293 A1 under PCT Article 21(2).

Field of the Invention

The present invention refers to a diagnosis system for identifying the origin of failures in the operation of household electric appliances, such as refrigerators, freezers, air conditioners, and others, in which the operation of their different loads is defined by a command module mounted to the refrigeration appliance. The invention is particularly related to a diagnosis system incorporated to the household electric appliance and operatively associated with the command module.

Prior Art

In household electric appliances, particularly in the refrigeration appliances defined by refrigerators and freezers, in which there are provided different devices or loads, such as defrost resistances, fans, lamps, and compressor, the operation thereof is controlled by an electronic command module which is programmed to activate and deactivate the switches (generally relays) that energize the different loads of the appliance as a function of the desired operational conditions. In these appliances, the command module and the different electronic controls are energized by a generally DC power source, which in turn is energized by the power system that energizes the appliance.

The quick and reliable identification of the different failures in the operation of the above-mentioned appliances already installed in the residences of the users has been a constant preoccupation of the manufacturers.